WE CLAIM:

1.   A method for scheduling multicast transmissions in a WLAN, said method comprising the steps of:

transmitting a first group poll from a Quality of Service (QoS) Access Point (QAP) to each station in a multicast group comprising a plurality of stations;

identifying an active station and inactive stations among said plurality of stations;.

transmitting a directed Contention Free (CF) poll from said QAP to said active station;

transmitting an inbound QoS data frame from said active station to said QAP; and

multicasting an outbound QoS data frame corresponding to said inbound QoS data frame from said QAP to said inactive stations.

2.   The method of claim 1, wherein the step of identifying an active station among said plurality of stations identifies as said active station a station that transmits, in response to said group poll, an inbound QoS data frame to said QAP.

3.   The method of claim 1, further comprising the steps of:

transmitting a QoS null frame from said active station to said QAP; and

transmitting a subsequent group poll from said QAP to each station in said plurality of stations.

4.   The method of claim 1, wherein said active station is a back-haul interface.

5.   The method of claim 1, wherein said step of identifying an active station comprises executing a back-off algorithm when a collision occurs

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when two of said stations respond to said first group poll with inbound QoS data frames.

6.   The method of claim 1, wherein said inactive stations do not respond to said first group poll.

7.   The method of claim 1, wherein said data frames comprise half duplex voice data frames.

8.   A system of a WLAN used for scheduling multicast transmissions, the system comprising:

a QAP having a back-haul interface, an inbound interface and an outbound interface; and

a plurality of stations operatively connected to said QAP through one of said back-haul, inbound, or outbound interfaces;

said QAP operative to receive a single poll for a multicast group consisting of some of said stations in said plurality of stations, and to transmit through said outbound interface or through said back-haul interface a group poll to said multicast group to identify an active station among said plurality of stations.

9.   The system of claim 8, wherein said QAP comprises a group scheduler.

10.   The system of claim 8, wherein said multicast transmissions comprise half duplex group voice transmissions.